11. Glossary/Acronyms

The following is a list of the technical terms and acronyms used in this document with definitions for each.

Access roads — Roads that are necessary to first construct and then to maintain a transmission line. Access roads are initially built where no roads conveniently exist. Where county roads or other access is already established, access roads are constructed as spurs directly to the structure sites. Access roads are usually maintained to provide access to tower sites, accept where they pass through cultivated land.

Airshed — An air supply of a given geographical area, usually defined by topographic barriers or atmospheric conditions that confine air emissions.

Alluvial — Pertaining to sediments deposited by flowing water.

Ambient air — Air surrounding a particular spot, such as a power plant.

Anhydrous — Being without water, especially water of crystallization.

Aquifer — A geologic formation or structure that contains and transmits water in sufficient quantity to supply the needs for water development. Aquifers are usually saturated sands, gravel, or fractured rock.

Angle point — Where a transmission line must change direction, it forms a corner, or angle. This is an angle point. Special reinforcement is needed to counter the stress on the structure.

Attainment area — A geographic area where the concentration of specific air pollutants does not exceed Federal ambient air quality standards.

Average megawatt (aMW) — The number of megawatts that could be produced by a power plant multiplied by the percent of time the power plant would normally be in operation over a specific period of time, usually one year.

BACT	Best available control technologies. An emission limitation based on the maximum degree of reduction of each pollutant subject to regu lation and emitted from, or which results from, any major emitting facility.
Best management practices	A practice or combination of practices that are the most effective and practical means of preventing or reducing the amount of pollu- tion generated by nonpoint sources to a level compatible with air or water quality goals.
Blowdown	Removal of liquids or solids from a process vessel or storage vessel using pressure.
B. P.	Before the present.
BPA	Bonneville Power Administration.
British Thermal Unit (BTU)	A quantity of heat required to raise the temperature of .45 Kg (1 pound) of water one degree Fahrenheit.
Bundle	A group of two, three or four conductors assembled together to transmit high voltage electric power, usually 500-kV.
Bus	A set of two or more electrical conductors that serve as common connections between load circuits and each of the phases (in alternating current systems) of the source of electric power.
Capacity	A measure of the ability of a transmission line to carry electricity.
Capital cost	The total investment needed to complete a project and bring it to an operable status.
Centimeter (cm)	A unit of measurement (in the metric system) equivalent to 0.3937 inches.
CH_4	Chemical formula for methane gas.
Circuit breakers	An electromagnetic device that opens a circuit automatically when the current exceeds a predetermined value.

Class I Area Area designated for the most stringent degree of protection from future degradation of air quality.

Class II Area Any area designated for a moderate degree of protection from future air quality degradation. Moderate increases in new pollution may be permitted in a Class II area.

Cogeneration The technology of producing electrical energy together with useful thermal or mechanical energy for industrial, or commercial purposes, through the sequential use of an energy source.

Cold lime water A water-softening process in which water is treated with hydrated lime (sometimes in combination with soda ash), which reacts with dissolved calcium and magnesium compounds to form precipitates that can be removed as sludge.

Combined cycle The use of waste heat from a gas turbine topping cycle for the generation of electricity in a steam turbine generator system, thereby increasing the efficiency of heat use.

Combustion turbine An integral part of cogeneration facilities operating on fuels that are capable of converting heat energy into electrical energy.

Conductor The cable strung between transmission towers around which electric current flows at the speed of light.

Cooperating Agency Any Federal agency, other than a lead agency, that has jurisdiction by law or special expertise for involvement in a proposal (or a reasonable alternative) for legislation or other major Federal action significantly affecting the quality of the human environment.

CO The chemical formula for Carbon monoxide. Carbon monoxide is a colorless, odorless and poisonous gas formed by incomplete combustion of carbon or a carbonaceous material, such as gasoline and natural gas.

CO_2 The chemical formula for carbon dioxide. Carbon dioxide is a colorless, odorless, incombustible gas formed during respiration, combustion and organic decomposition, and commonly used in food refrigeration, carbonated beverages, inert atmospheres, fire extinguishers and other aerosols.

Criteria pollutant — An air pollution substance for which the Environmental Protection Agency has established ambient air quality standards.

CT — Combustion turbine.

Cultural resources — Nonrenewable evidence of human occupation or activity as seen in any district, site, building, structure, artifact, ruin, object, work of art, architecture, or natural feature that was important in human history at the national, state, or local level.

Cumulative impact — The impact on the environment that results from an action when added to other past, present, and reasonable foreseeable future actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over time.

dBA — The first two letters (dB) are an abbreviation for the term "decibel" the unit in which sound is most commonly measured. The last letter (A) is an abbreviation for the scale (A scale) on which the sound measurements were made. A decibel is a unit for expressing relative difference in power, usually between acoustic signals, equal to 10 times the common logarithm of the ratio of two levels.

d.b.a. — Abbreviation for "doing business as."

Depository libraries — Selected libraries where copies of the reference materials such as the environmental documents associated with this proposed project are kept for review and comment by the public. A list of the depository libraries related to the Coyote Springs Cogeneration Project are contained in Section 8 of this draft EIS.

DEIS — Draft Environmental Impact Statement

DEQ — Department of Environmental Quality (Oregon).

Disconnect switches — A power system switch used to open a circuit in which a negligible amount of current, or no current, is flowing. Disconnect switches are manually or motor operated and are not used to interrupt a circuit under load.

Drift — Portion of the moisture emitted that recondenses on a surface.

Double-circuit Two sets of lines (circuits) on a single tower (a single circuit consists of three conductors).

DSL Division of State Lands.

Easement A grant of certain rights for use of a parcel of land, normally for a single purpose. BPA's easements normally provide for the right to enter a specific right-of-way, and to build, maintain, and repair facilities located there.

EIS Environmental Impact Statement. A document defined at 40 CFR 1508.11 and prepared in accordance with the requirements of section 102(c) of NEPA, the Council on Environmental Quality Regulations, and DOE NEPA Guidelines.

Electric and magnetic fields (EMF) The two types of fields of force that are produced by electricity i.e., those that are produced by voltage (electric fields) and those that are produced by current (magnetic fields). Electric fields are produced by the force that causes current to flow through a conductor (voltage) and are measured by kilovolts per meter (kV/m). Magnetic fields are produced by the force that causes electrons to move in a conductor (current) and are measured in milligauss (mG).

Electric field An energy field produced by voltage, measured in kilovolts per meter.

Emergent As used here, a plant that is rooted and has parts extending above a water surface.

Emissions Substances discharged into the environment as waste material, such as discharge into the air from cooling towers or discharges into the water from waste streams.

Endangered A plant or animal that is in danger of extinction throughout all or a significant portion of its range because its habitat is threatened with destruction, drastic modification, or severe curtailment, or because of overexploitation, disease, predation, or other factors; Federally endangered species are officially designated by the U. S. Fish and Wildlife Service.

Energy The ability to produce electrical power over a period of time, expressed in kilowatt-hours.

Entrainment	Drawing fish and other aquatic organisms into tubes or tunnels carrying cooling water into thermal plants or into penstocks and turbines at a hydroelectric plant; increases death rates for those organisms.
Environmental assessment	A report of possible environmental effects that would result from a proposed Federal action . An environmental assessment is used to determine if an EIS or Finding or No Significant Impact is required by the National Environmental Quality Act of 1969, as amended.
Environmental impact statement	A detailed disclosure of environmental impacts that would result from an action, written as required by the National Environmental Quality Act of 1969, as amended.
Environmentally preferred	Designates the lowest-impact alternative locations and/or design options, based on the results of an environmental analysis.
EPA	U.S. Environmental Protection Agency
FEIS	Final Environmental Impact Statement
FERC	Federal Energy Regulatory Commission. An agency in the U.S. Department of Energy that regulates interstate transfers of electrical energy, certificates for natural gas pipelines, resource development, and other energy actions.
Fiber optic cable	Special glass wire installed on a transmission line that is used for communication between one location and another.
Firm energy	The amount of electricity that can be transferred over the system in the case of one failure. Firm energy is the equal to the single contingency rating of a transmission system.
Generation	The power that is produced through some type of power plant.
Generator	A machine that converts mechanical energy into electrical energy.

Global Warming	The phenomenon of gradually increasing average temperatures in the earth's atmosphere thought to be due primarily to accumulation of carbon dioxide and other greenhouse gases in the atmosphere.
Greenhouse gas	A gas that absorbs infrared light, thus preventing heat loss to outer space. A gas that is thought to contribute to global warming.
Groundwater	The supply of fresh water under the earth's surface in an aquifer or soil.
gpm	Gallons per minute.
Habitat	The environment occupied by individuals of a particular species, population, or community.
Hazardous waste	Substances which, if released in an uncontrolled manner, can be harmful to the environment.
Hectare (ha)	An area equivalent to 10,000 square meters or 2.471 acres.
Hectometer	A unit of measurement (metric) equivalent to one million cubic meters (263,000,000 gallons).
Historic Preservation	Includes identification, evaluation, recordation, documentation, acquisition protection, management, rehabilitation, restoration, stabilization, maintenance, or reconstruction or any combination of these activities.
Human environment	Interpreted comprehensively to include the natural and physical environment and the relationship of people with that environment.
Hydrocarbons	Chemical compounds containing hydrogen and carbon. Some hydrocarbons may become air pollutants. Some hydrocarbon air pollutants are carcinogenic, and some react with other air pollutants to form photochemical smog.
Impact	Positive or negative environmental consequences of a proposed action.
Increment	Allowable increase in pollutants over ambient conditions.

Isolates Small isolated cultural resource sites containing prehistoric artifacts.

Kiloliter (kL) 1,000 liters.

Kilometer (km) 1,000 meters.

Kilovolt One thousand volts.

Kilowatt (kW) An electrical unit of power equal to 1000 watts.

Kilowatt hour (kWh) A basic unit of electric energy equal to one kilowatt for the period of one hour.

Knot The distance of one nautical mile - or one minute of latitude.

Lattice steel Refers to a transmission tower constructed of multiple steel members that are connected together to make a frame.

Level 1 audit A initial on-site visit and records search to predict previous contamination.

Liter (L) A unit of volume equivalent to 0.2642 gallons.

L_{MAX} A symbol that represents the maximum permitted noise level (measured in decibels).

L_{50} A symbol that represents the maximum permitted noise level a project may create 50 percent of the time in a day.

Load The amount of electric power delivered to a given point on a system, or the total amount of demand on the system.

Loop To tie a substation into an existing transmission line in such a manner as to complete the circuit along that line. Running a double-circuit loop line to a substation would allow an incoming line and an outgoing line.

Magnetic field An energy field produced by the movement of electrons in a wire (current), measured in milligauss (mG).

Megawatt (MW) One thousand kilowatts (kw) or one million watts (W).

Methane (CH_4) An odorless, colorless, flammable gas formed by the anaerobic decomposition of organic matter. Methane is the major component of natural gas, making up 90-95 percent of the volume. In addition to its use as a fuel, methane is an important source of hydrogen and is used in a wide variety of organic compounds.

Mitigation Actions to avoid, minimize, reduce, eliminate, or compensate for the impact of a proposed activity or management practice.

Meter (m) Unit of length equal to 3.28 feet.

m^3 Cubic meter. Equal to 1,000 liters or 263 gallons.

Natural gas A mixture of hydrocarbon gases that occurs with petroleum deposits, chiefly methane, together with varying quantities of ethane, butane, propane, and other gases. In addition to its use as a fuel, it is commonly used in the manufacture of organic compounds.

NAAQS National Ambient Air Quality Standards of the U.S. Environmental Protection Agency.

NEPA National Environmental Policy Act. Major Federal legislation passed by Congress in 1969 that requires that environmental impacts of major Federal actions be identified in a detailed statement of environmental impact, along with reasonable alternatives to the proposed actions. Furthermore, environmental impacts must be made known to the public and to the decisionmaker, prior to a decision being made on the project.

NESC National Electric Safety Code.

Nonattainment An area that does not meet National air quality standards.

Non-specular To reduce the reflectivity of any object (such as electrical conductors) so that it does not reflect an inordinate amount of light.

NOEL No Observed Effects Level. The dose at which adverse effects are not observed in laboratory animal exposures.

NO_x Oxides of nitrogen.

N_20	The chemical formula for nitrous oxide. Nitrous oxide is a colorless, sweet, inorganic gas commonly known as laughing gas.
NO_2	The chemical formula for nitrogen dioxide. Nitrogen dioxide is a mildly poisonous brown gas often found in exhaust fumes and smog. It is synthesized for use as a catalyst and oxidizing or nitrating agent.
NPDES	National Pollution Discharge Elimination System. Federal water qualityprogram administered by the State agency responsible for water quality.
NSPS	New Source Performance Standards
NSR/PSD	New Source Review/Prevention of Significance.
OGCA	Oregon Groundwater Critical Area
ODOE	Oregon Department of Energy
ODOT	Oregon Department of Transportation
ONHP	Oregon National Heritage Program.
Outage	The period which a facility is out of service.
O_2	The chemical formula for oxygen. Oxygen is a colorless, odorless gas constituting 21 % of the earth's atmosphere by volume. It is a necessary constituent to most combustion and combustion processes.
Palustrine	General freshwater wetlands classification associated with partially saturated areas not part of a surface water system.
Particulates	Fine solid particles which remain individually dispersed in stack emissions
PGE	Portland General Electric Company.
PGT	Pacific Gas Transmission Company.
PM 10	Particulate matter smaller than 10 microns

Polychlorinated biphenyl (PCB)	Oily substance manufactured for use primarily as a dielectric in capacitors. Banned from use after research showed that PCBs cause skin disease and liver damage, and are a suspected carcinogen.
ppm	Parts per million.
PSD	Prevention of significant deterioration
Prevailing wind direction	The wind direction most frequently observed during a given period, such as a month, a season, or a year. The prevailing wind direction is the direction from which the wind originates, usually expressed as "out of" or "from.
Record of Decision (ROD)	A document prepared in accordance with the requirements of 40 CFR 1505.2, that provides a concise public record of the agency's decision on a proposed action for which an EIS was prepared, and identifies alternatives considered before reaching the decision, the environmentally preferred alternative(s), factors balanced by the agency making the decision, and whether all practical means to avoid or minimize environmental harm have been adopted and if not, why.
Right-of Way (ROW)	An easement for a certain purpose over the land of another, such as a strip of land used for a transmission line, roadway or pipeline.
Riprap	A wall of rocks, cobbles, or boulders put together without order to protect an embankment against water erosion.
Scoping	A method to determine the range of issues requiring examination in studying the environmental effects of a proposed action. Scoping generally takes place through public consultation with interested individuals and groups, as well as with agencies with jurisdictions either over portions of the project area or resources within the project area. Scoping is mandated by the Council on Environmental Quality.
SHPO	State Historic Preservation Office

Significant Emissions Rate	Annual rate of emissions for specific pollutant that identifies a "major" air pollution source in DEQ regulations
SO_2	The chemical formula for sulfur dioxide. Sulfur dioxide can be found in either a gaseous or liquid state. It is commonly used in the manufacture of sulfuric acid.
Structure	Refers to the type of supports used to elevate transmission lines or substation equipment
Supercooling	Cooling a substance below the temperature at which a change of state would ordinarily take place without such a change of state occurring. For example, cooling a liquid below its freezing point without freezing taking place. This creates a metastable state.
Superheating	Heating a substance above the temperature at which a change of state would ordinarily take place without such a change taking place. For example, heating a liquid above its boiling point without boiling taking place.
SWPP	Storm Water Pollution Prevention Plan.
Tap	To tie a substation into an existing transmission line through a connection.
Tap Point	The point where two transmission lines interconnect.
Therm	The equivalent of 100,000 BTU's
Threatened species	Those species officially designated by the U.S. Government that are likely to become endangered within the foreseeable future throughout all or a significant portion of their range.
Tower	See structure.
Transformer	A device for transferring energy from one circuit to another in an alternating-current system. Its most frequent use in power systems is for changing voltage levels.

Transmission	The act or process of transporting electrical energy in bulk from a source or sources of supply to other principal parts of a system or to other utility systems
Transmission line	The structures, insulators, conductors and other equipment used to transfer electrical power from one point to another.
Trojan	Trojan Nuclear Power Plant located near Rainier, Oregon. Trojan recently ceased generating electric power.
Uniform Building Code (UBC)	A code published by the International Conference of Building Officials. Covers the fire, life and structural safety aspects of all building and related structures.
Urban Growth Boundary (UGB)	A mutually agreed upon boundary between a city and the county. It includes an area which has been set aside for future urban growth. The boundary line separates land that can be developed from rural lands.
ug/m^3	Unit of measurement commonly used to measure pollutants in air, specifically the number of micrograms per liter.
VOC	Volatile organic compounds. Compounds containing carbon that evaporate readily at normal room temperature and pressure.
USFWS	U.S. Fish and Wildlife Service.
Volt	The unit of voltage or potential difference. It is the electromotive force which, if steadily applied to a circuit having a resistance of one ohm, will produce a current of one ampere.
Watt	The electrical unit of power or rate of doing work. The rate of energy transfer equivalent to one ampere flowing under the pressure of one volt.
Wetlands	An area where the soil experiences anaerobic conditions because of the inundation of water during a portion of any given year. Indicators of a wetland include types of plants, soil characteristics and hydrology of the area.
Wheeling	Use of transmission facilities of one utility system to transmit power to another utility system or between customer facilities within a single utility system.

Work Transference of energy that occurs when a force ` is applied to a body that is moving in such a way that the force has a component in the direction of the body's motion; it is equal to the line integral of the force over the path taken by the body.

Wastewater Water that carries wastes from buildings, institutions, and industrial establishments.

To Chapter 12